

**TOSHIBA**

**2SA1618**

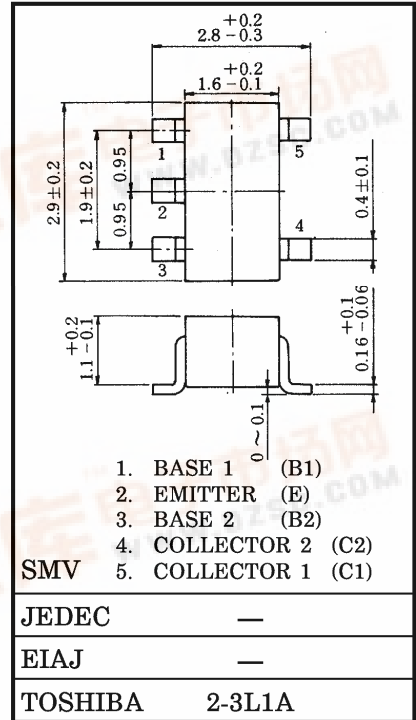
TOSHIBA TRANSISTOR SILICON PNP EPITAXIALTYPE (PCT PROCESS)

# 2SA1618

AUDIO FREQUENCY GENERAL PURPOSE AMPLIFIER APPLICATIONS.

- Small Package (Dual Type)
- High Voltage and High Current  
:  $V_{CEO} = -50V, I_C = -150mA$  (Max.)
- High  $h_{FE}$  :  $h_{FE} = 120 \sim 400$
- Excellent  $h_{FE}$  Linearity  
:  $h_{FE}(I_C = -0.1mA) / h_{FE}(I_C = -2mA) = 0.95$  (Typ.)
- Complementary to 2SC4207

Unit in mm



SMV

JEDEC

EIAJ

TOSHIBA 2-3L1A

Weight : 0.014g

MAXIMUM RATINGS ( $T_a = 25^\circ C$ ) (Q1, Q2 COMMON)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-50	V
Collector-Emitter Voltage	$V_{CEO}$	-50	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-150	mA
Base Current	$I_B$	-30	mA
Collector Power Dissipation	$P_C^*$	300	mW
Junction Temperature	$T_j$	125	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~125	$^\circ C$

\* Total Rating

ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ ) (Q1, Q2 COMMON)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -50V, I_E = 0$	—	—	-0.1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$	—	—	-0.1	$\mu A$
DC Current Gain	$h_{FE}$ (Note)	$V_{CE} = -6V, I_C = -2mA$	120	—	400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -10mA$	—	-0.1	-0.3	V
Transition Frequency	$f_T$	$V_{CE} = -10V, I_C = -1mA$	80	—	—	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$	—	4	7	pF

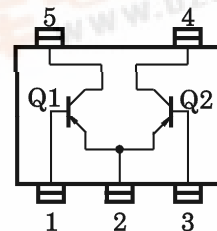
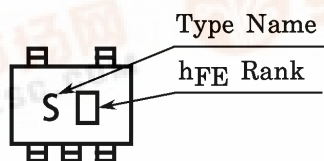
Note :  $h_{FE}$  Classification

Y (Y) : 120~240, GR (G) : 200~400

( ) Marking Symbol

EQUIVALENT CIRCUIT (TOP VIEW)

MARKING

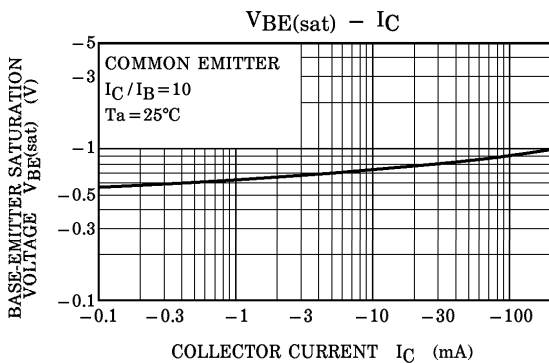
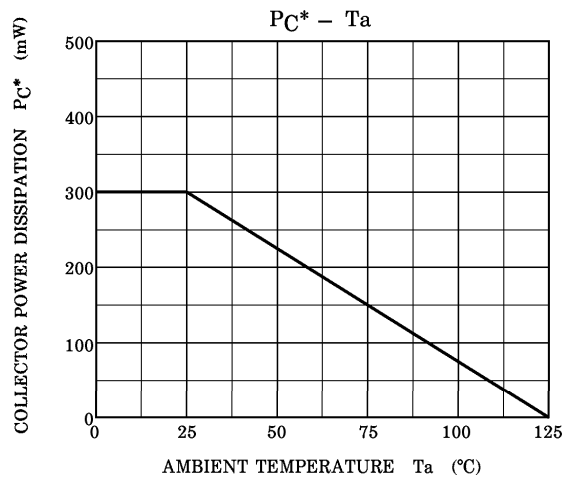
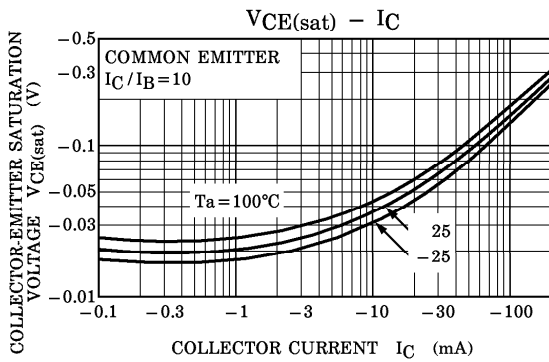
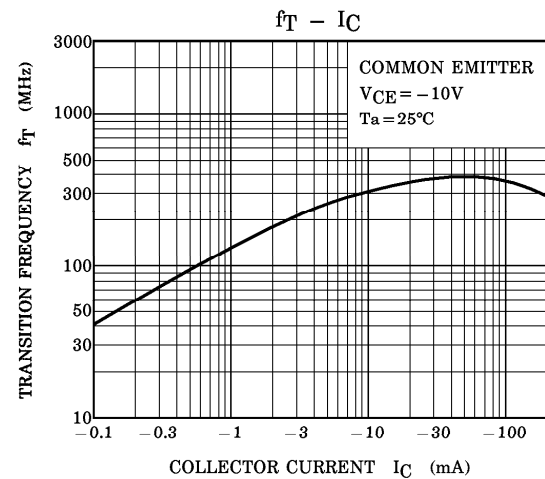
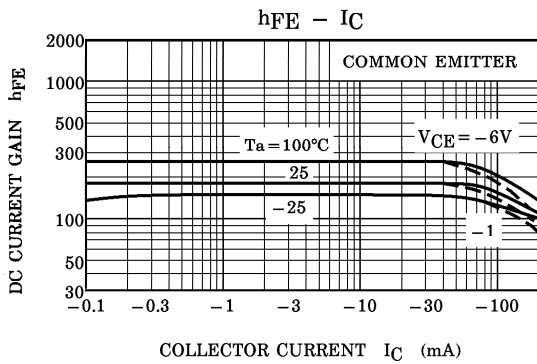
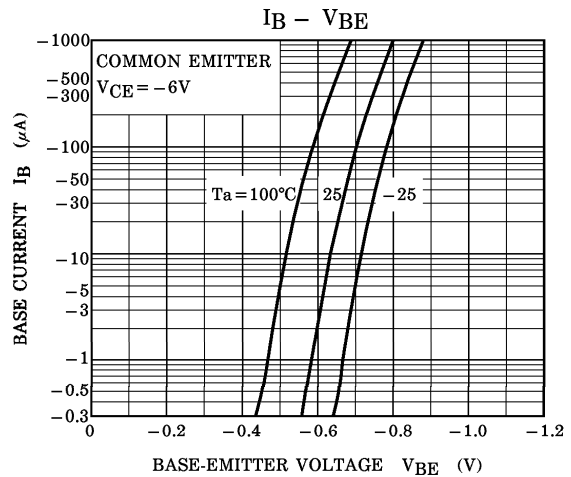
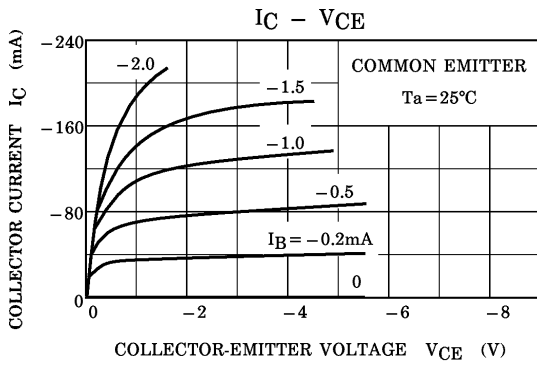


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(Q1, Q2 COMMON)



\*: Total Rating

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